

Amendments to the Specification:

Please add an Abstract as follows:

Abstract

A magnetic resonance imaging (MRI) system includes a main magnet system for generating a main magnetic field in an examination volume. A gradient coil system is arranged between the main magnet system and the examination volume
5 and includes sub-gradient coils embedded in a binding material which has a glass temperature. A controller controls a temperature of the gradient coil system. A temperature-influencing unit influences the temperature of the gradient coil system on the basis of control signals supplied by the control unit. The control unit and the temperature-influencing unit control the temperature of the binding material of the
10 gradient coil system to a value above the glass temperature during operation of the MRI system.